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Even though it is hot outside, it is a good time to plan your fall and winter time pond management activities. Lime an important part of water quality maintenance, and helps to improve the quality of the algae in the pond. Maintaining a healthy pond will improve fish production and your fishing experience.

Lime is used in pond management for a variety of reasons, one of which is to improve algae growth. Algae are the foundation of a pond's food chain, and are the primary oxygen source for fish. By adding lime to a pond system, a greater percentage of the nutrients found in fertilizer are available to the algae, thus improving the productivity of the pond. Additional benefits from the addition of lime include its buffering capacity. Ponds, limed appropriately, are better prepared to withstand pH changes, reducing stress on fish.

To accurately determine if a pond is in need of liming, alkalinity testing should be done. A soil sample can be taken in several places from the pond bottom to get an average of soil conditions within the pond. Samples should be allowed to dry completely, and then be mixed well. This mixture can be sent to a soil-testing lab (e.g. Auburn University) where, for a small fee, analysis will be completed. In the absence of soil testing, a test that measures the total alkalinity of the pond, time elapsed from last lime application, flow rate, application rate, and results of fertilization can estimate a pond's liming needs.

Application of lime should be done at the correct time to provide the expected results to the pond system. In most cases, lime should be added at the end of the fertilization season, in late fall and winter. Introducing lime at this time will increase the effectiveness of spring fertilization. Adding lime simultaneously with fertilizer is not recommended to prevent the loss of phosphorus.

There are several types of lime available to the pond manager including slaked lime, liquid lime, and agricultural lime. The best source for pond application is agricultural lime. Slaked lime is not recommended for ponds already containing fish, and liquid lime usually does not contain the same concentration of lime as agricultural lime. A typical liming recommendation is 2-5 tons per acre. The recommendation will change depending on the flow of water from the pond, age of pond, pH, and time elapsed from last liming.

When applying lime, it is important to treat the entire pond bottom. Various methods will work, however, simply dumping a pile of lime in the pond will not. For large ponds, a boat may be necessary to allow access to the entire bottom. The goal is an even coverage of the bottom with the recommended amount of lime. For new ponds, liming should be completed prior to initial filling.

For additional questions or information, contact P.J. Waters, Auburn University Marine Extension and Research Center, 438-5690.